

AMENDMENTS TO THE CLAIMS:

The following listing of claims replaces all prior listings, and all prior versions, of claims in the application.

LISTING OF CLAIMS:

1. (Cancelled).

2. (Previously presented) A manufacturing method for an electronic device providing an IC chip having an external electrode formed respectively on each of the faces of an opposing pair of faces, a transmission and reception antenna having a slit formed therein and a bridging plate that electrically connects the IC chip and the antenna, having at least the steps of:

forming a plurality of antenna circuits using a first metallic film and forming an antenna substrate by disposing the antenna circuits on a base substrate, or forming an antenna substrate by providing a plurality of antenna circuits from the first metallic film disposed on a base substrate;

arranging in at least one of a longitudinal orientation or a horizontal orientation, a plurality of the IC chips, with the same intervals therebetween as are required when the plurality of the IC chips are arranged in determined positions with respect to the corresponding circuits of the plurality of antenna circuits that the plurality of the IC chips is mounted thereon;

tentatively securing the plurality of IC chips at once, to bridging plates having a second metallic film formed thereon via a first anisotropic conductive adhesive layer such that the plurality of the IC chips thus arranged are electrically connected, and producing bridging plates with the IC chips attached;

positionally aligning the bridging plates with IC chips attached in the determined position on the plurality of antenna circuits such that the plurality of the IC chips are electrically connected; and

performing thermal compression binding that joins the bridging plates with IC chips attached at once in the determined positions on the antenna substrate via a second anisotropic conductive adhesive layer.

3.-10. (Cancelled).

11. (Withdrawn) A member of an electronic device that comprises an IC chip having an external electrode formed respectively on each of the faces of an opposing pair of faces, a transmission and reception antenna having a slit formed therein and a bridging plate that electrically connects the IC chip and the antenna, wherein the member is semiconductor elements of the condition in that an anisotropic conductive adhesive layer having been formed on the respective surfaces of the IC chip that the external electrodes attach thereto, the IC chip is enclosed between these anisotropic conductive adhesive layers.

12. (Withdrawn) A member of an electronic device that comprises an IC chip having an external electrode formed respectively on each of the faces of an opposing pair of faces, a transmission and reception antenna having a slit formed therein and a bridging plate that electrically connects the IC chip and the antenna, wherein the member is semiconductor elements of the condition in that an anisotropic conductive adhesive layer having been formed on the respective

surfaces of the IC chip that the external electrodes attach thereto, the IC chip is enclosed between these anisotropic conductive adhesive layers while another bridging plate has been disposed on the surface of one of those anisotropic conductive adhesive layers.

13. and 14. (Cancelled).

15. (Currently amended) The manufacturing method ~~offer~~ an electronic device according to claim 34[[4]], wherein at least one of the first metallic film ~~and~~ the second metallic film is supported on a base substrate of an organic resin, this organic resin being selected from the group consisting of polyvinyl chloride (PVC), acrylonitrile butadiene styrene (ABS), polyethylene terephthalate (PET), polyethylene terephthalate glycol derivative (PETG), polyethylene naphthalate (PEN), polycarbonate resin (PC), biaxial polyester (O-PET), and polyimide resin.

16. (Currently amended) The manufacturing method ~~offer~~ an electronic device according to claim 34[[4]], wherein at least one of the first metallic film ~~and~~ the second metallic film is supported on a base substrate comprised of paper.

17. (Currently amended) The manufacturing method ~~offer~~ an electronic device according to claim 27~~2~~, wherein gaps between the antenna substrate and bridging plate are sealed by thermal compression bonding~~binding~~ of the first and second anisotropic conductive adhesive layers.

18. (Currently amended) The manufacturing method offer an electronic device according to claim 34[[4]], wherein gaps between the antenna substrate and bridging plate are sealed by thermal compression bonding~~binding~~ of the first and second anisotropic conductive adhesive layers.

19. (Currently amended) The manufacturing method offer an electronic device according to claim 272, wherein after the process in that the plurality of IC chips are thermal compression bonded~~bound~~ at once with the antenna substrate and the bridging plates, a process is performed in that a continuum of antenna circuits is cut into individual pieces.

20. (Currently amended) The manufacturing method offer an electronic device according to claim 265, wherein after the process in that the plurality of IC chips are thermal compression bonded~~bound~~ at once with the antenna substrate and the bridging plates, a process is performed in that a continuum of antenna circuits is cut into individual pieces.

21. (Currently amended) The manufacturing method offer an electronic device according to claim 272, wherein thermal compression bonding~~binding~~ is performed that joins the bridging plates and the IC chips with the antenna substrate.

22. (Currently amended) The manufacturing method offer an electronic device according to claim 265, wherein thermal compression bonding~~binding~~ is performed that joins the bridging plates and the IC chips with the antenna substrate.

23. (New) A method of manufacturing an electronic device that includes (1) an IC chip having two external electrodes, the external electrodes being formed respectively on one and the other of the faces of an opposing pair of faces of the IC chip, (2) a transmission and reception antenna having a slit formed therein, and (3) a bridging plate that electrically connects the IC chip and the antenna, the transmission and reception antenna being on a base substrate, the method comprising:

arranging a plurality of IC chips in at least one of a longitudinal orientation or a horizontal orientation;

positionally aligning at least one of the plurality of IC chips at a position corresponding to a determined position on an antenna circuit on which the at least one of the plurality of IC chips is being mounted, the at least one of the plurality of IC chips being positioned onto an anisotropic conductive adhesive layer; and

performing thermal compression bonding that joins the bridging plate on the transmission and reception antenna such that the bridging plate spans the slit and electrically connects the IC chip and the antenna.

24. (New) The method of manufacturing an electronic device according to claim 23, wherein the arranging the plurality of the IC chips in at least one of a longitudinal orientation or a horizontal orientation, includes using a jig having concavities of appropriate dimensions to accommodate an IC chip, providing the plurality of IC chips on the jig, and then shaking the jig such that the IC chips on the jig are accommodated in the concavities, with the concavities of the jig having the same intervals therebetween as are required when the plurality of the IC chips are

arranged in determined positions with respect to the corresponding circuits of the plurality of antenna circuits that the plurality of the IC chips are to be mounted upon, whereby the plurality of IC chips are arranged at a same time.

25. (New) The method of manufacturing an electronic device according to claim 23, wherein the thermal compression bonding joins the bridging plate and the IC chip with a substrate of the antenna.

26. (New) The method of manufacturing an electronic device according to claim 23, further comprising:

dividing a bridging plate such that one piece is equivalent to the number of the IC chips in a line arranged in the widthwise direction of an antenna substrate, that can be subject to thermal compression bonding at once, line by line;

positionally aligning bridging plates with one row of antenna circuits arranged in the widthwise direction of an antenna substrate; and

performing thermal compression bonding that joins the bridging plates on the IC chips and the antenna substrate via an anisotropic conductive adhesive layer.

27. (New) A method of manufacturing an electronic device that includes (1) an IC chip having two external electrodes, the external electrodes being formed respectively on one and the other of the faces of an opposing pair of faces of the IC chip, (2) a transmission and reception antenna having a slit formed therein, the transmission and reception antenna being on a base substrate, and (3) a bridging plate that electrically connects the IC chip and the antenna, the method comprising:

forming a plurality of antenna circuits that include a first metallic film and forming an antenna substrate by disposing the antenna circuits on the base substrate; or forming an antenna substrate by providing a plurality of antenna circuits, by etching, from the first metallic film deposited on the base substrate;

arranging a plurality of the IC chips in at least one of a longitudinal orientation or a horizontal orientation, with a same interval therebetween as is required when the plurality of the IC chips are arranged in determined positions with respect to corresponding circuits of the plurality of antenna circuits that the plurality of the IC chips are to be mounted upon;

securing the plurality of IC chips at once, to bridging plates having a second metallic film formed thereon via a first anisotropic conductive adhesive layer such that the plurality of the IC chips thus arranged are electrically connected, thereby producing bridging plates with the IC chips attached;

positionally aligning the bridging plates with IC chips attached in the determined positions on the plurality of antenna circuits, such that the plurality of the IC chips are electrically connected; and

performing thermal compression bonding that joins the bridging plates with IC chips attached at once in the determined positions on the antenna substrate via a second anisotropic conductive adhesive layer, such that the bridging plate spans the slit and electrically connects the IC chip and the antenna.

28. (New) The method of manufacturing an electronic device according to claim 27, wherein at least one of the first metallic film and the second metallic film is aluminum.

29. (New) The method of manufacturing an electronic device according to claim 27, wherein at least one of the first metallic film and the second metallic film is supported on a base substrate of an organic resin, said organic resin being selected from the group consisting of polyvinyl chloride (PVC), acrylonitrile butadiene styrene (ABS), polyethylene terephthalate (PET) polyethylene terephthalate glycol derivative (PETG), polyethylene naphthalate (PEN), polycarbonate resin (PC), biaxial polyester (O-PET), and polyimide resin.

30. (New) The method of manufacturing an electronic device according to claim 27, wherein at least one of the first metallic film and the second metallic film is supported on a base substrate comprised of paper.

31. (New) The method of manufacturing an electronic device according to claim 27, wherein gaps between the antenna substrate and bridging plate are sealed by thermal compression bonding of the first and second anisotropic conductive adhesive layers.

32. (New) The method of manufacturing an electronic device according to claim 27, wherein after the process in that the plurality of IC chips are thermal compression bonded at once with the antenna substrate and the bridging plates, a process is performed in that a continuum of antenna circuits is cut into individual pieces.

33. (New) A method of manufacturing an electronic device that includes (1) an IC chip having two external electrodes, the external electrodes being formed respectively on one and the other of the faces of an opposing pair of faces of the IC chip, (2) a transmission and reception antenna having a slit formed therein, the transmission and reception antenna being on a base substrate, and (3) a bridging plate that electrically connects the IC chip and the antenna, the method comprising:

forming a plurality of antenna circuits that include a first metallic film and forming an antenna substrate by disposing the antenna circuits on a base substrate; or forming the antenna substrate by providing a plurality of antenna circuits, by etching, from the first metallic film deposited on the base substrate;

arranging in at least one of a longitudinal orientation or a horizontal orientation, a plurality of the IC chips, with a same interval therebetween as is required when the plurality of the IC chips are arranged in determined positions with respect to the corresponding circuits of the plurality of antenna circuits that the plurality of the IC chips are to be mounted upon;

tentatively securing the IC chips, via a first anisotropic conductive adhesive layer, after the plurality of the arranged IC chips have been positionally aligned at once, such that the plurality of the IC chips are electrically connected in the determined positions with respect to the corresponding circuits of the plurality of antenna circuits that the plurality of the IC chips are mounted upon;

positionally aligning the tentatively secured plurality of IC chips with bridging plates having a second metallic film so as to be electrically connected in the determined position on an antenna circuit; and

performing thermal compression bonding that joins the bridging plates at once on the plurality of the IC chips and the antenna substrate, via a second anisotropic conductive adhesive layer such that the bridging plate spans the slit and electrically connects the IC chip and the antenna.

34. (New) A method of manufacturing an electronic device that includes (1) an IC chip having two external electrodes, the external electrodes being formed respectively on one and the other of the faces of an opposing pair of faces of the IC chips, (2) a transmission and reception antenna having a slit formed therein, the transmission and reception antenna being on a base substrate, and (3) a bridging plate that electrically connects the IC chip and the antenna, the method comprising:

forming a plurality of antenna circuits that include a first metallic film and forming an antenna substrate by disposing the antenna circuits on a base substrate; or forming the antenna substrate by providing a plurality of antenna circuits, by etching, from the first metallic film deposited on the base substrate;

forming a first anisotropic conductive adhesive layer in a determined position on an antenna circuit of the plurality of antenna circuits;

arranging in at least one of a longitudinal orientation or a horizontal orientation, a plurality of the IC chips, with a same interval therebetween as is required when the plurality of the IC chips are arranged in determined positions with respect to the corresponding circuits of the plurality of antenna circuits that the plurality of the IC chips are to be mounted upon, the plurality of the IC chips being arranged on the first anisotropic conductive adhesive layer;

tentatively securing the IC chips, after the plurality of the IC chips arranged on the first anisotropic conductive adhesive layer have been positionally aligned at once, such that the plurality of the IC chips are electrically connected in the determined positions with respect to the corresponding circuits of the plurality of antenna circuits that the plurality of IC chips are mounted upon;

forming a second anisotropic conductive adhesive layer in determined positions on the plurality of IC chips thus tentatively secured and the antenna circuits;

positionally aligning the tentatively secured plurality of IC chips with bridging plates having a second metallic film so as to be electrically connected in the determined position on an antenna circuit; and

performing thermal compression bonding that joins the bridging plates at once on the plurality of the IC chips and the antenna substrate such that the bridging plate spans the slit and electrically connects the IC chip and the antenna.